

U.S. Fish & Wildlife Service Sacramento Fish & Wildlife Office Species Account



STEBBINS' MORNING GLORY

Calystegia stebbinsii

CLASSIFICATION: Endangered

Federal Register <u>61:54346</u> (PDF 104 KB); October 18, 1996

This species was listed as endangered by the California Department of Fish and Game in August 1981. The California Native Plant Society has placed it on List 1B (rare or endangered throughout its range)

CRITICAL HABITAT: None designated



RECOVERY PLAN: <u>Recovery Plan for Gabbro Soil Plants of the Central Sierra Foothills</u>.

8/30/2002

http://ecos.fws.gov/docs/recovery_plan/020830b.pdf (6 MB)

5-YEAR REVIEW: INITIATED Federal Register 74:12878; 3/25/2009

DESCRIPTION

Stebbins's morning glory is a leafy perennial herb in the morning-glory family (Convolvulaceae). Its stems range up to 1 meter (3.3 feet) in length and generally lie flat on the ground. The leaves are palmately lobed (i.e., the lobes radiate out like fingers from the palm of a hand). The two outermost lobes are divided again. The 7 to 9 leaf lobes are narrow and lance-shaped. The distinctively shaped leaves distinguish Stebbins's morning glory from other California morning-glories.

White flowers appear in May through June on stalks about 2 1/2 to 13 centimeters (1 to 5 inches) long. Each flower has two leaf-like bracts. The fruit is a slender capsule. See Hickman (1993) in General Information about California Plants, below, for a detailed description of the species.

DISTRIBUTION

Stebbins's morning glory grows in two localized areas near Pine Hill in the Sierra Nevada foothills of western El Dorado County. The species was also recently was discovered in Nevada County near the County landfill. It may have been transplanted from El Dorado County by the transport of soil to the Nevada County Sanitary Landfill. Most of the plants are on private property.

In El Dorado County, the species is associated with chaparral on gabbro-derived soils. In Nevada County it occurs on serpentine soil.

Gabbro-derived soils originate from mafic rocks (gabbrodiorite) that are mildly acidic, are rich in iron and magnesium, and often contain other heavy metals such as chromium. Gabbro, a dark large-crystalled rock, is formed when liquid magma cools slowly underground. A red soil is formed when the rock is exposed and weathers at the earth's surface. These soils are well-drained and are underlain by gabbrodiorite rocks at a depth of more than 3 feet.

Serpentine-derived soils are formed through a process similar to formation of gabbro-derived soils. Serpentine soils are derived from ultramafic rocks (e.g., serpentinite, dunite, and peridotite). They tend to have high concentrations of magnesium, chromium, and nickel, and low concentrations of calcium, nitrogen, potassium, and phosphorus. Serpentine soils are considered to be similar to gabbro because of their mineral composition and because they appear to influence plant distributions in much the same way.

THREATS

Development has extirpated at least one-third of the known occurrences. Other threats to these populations include off-road vehicle use, grading, dumping, road maintenance, changes in fire frequency, and competition with nonnative plants.

REFERENCES FOR ADDITIONAL INFORMATION

Learn more about protection efforts by the Pine Hill Preserve (http://www.pinehillpreserve.org)

General Information about California Plants (http://www.fws.gov/sacramento/images/

Photo credit: Jeremiah Karuzas, FWS. Larger image: http://www.fws.gov/sacramento/images/Stebbins_morning_glory_Jeremiah_Karuzas_FWS.jpg

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